

- [002] This application claims priority from German Application Serial No. 103 14 332.7 filed March 28, 2003.
- [003] FIELD OF THE INVENTION
- [004] The invention concerns a hydrodynamic torque converter of the type defined in greater detail in the preamble of Claim 1.
- [005] BACKGROUND OF THE INVENTION
- [009] —— This objective is achieved with a hydrodynamic torque converter of the type described, which also has the characterizing features of the principal claim.
- [010] SUMMARY OF THE INVENTION
- [017] BRIEF DESCRIPTION OF THE DRAWINGS
- [018] —— Other characteristics emerge from the description of the figures, which show The invention will now be described, by way of example, with reference to the accompanying drawings in which:
- [021] DETAILED DESCRIPTION OF THE INVENTION
- [023] Fig. 2:
The hydrodynamic torque converter of Fig. 2 works in a manner analogous to the torque converter of Fig. 1, but such that the torque converter of Fig. 2 actuates the clutch 2 in its opening direction when the converter's internal pressure, which acts on the first side 8 of the piston 9, is greater than the actuation pressure acting on the second side 11 of the piston 9. The clutch 2 in Fig. 1 is actuated in the opening direction when the actuation converter's internal pressure acting on the second side 11 of the piston 9 is greater than the actuation pressure acting on the first side 8 of the piston 9. Accordingly, the piston 9 in Fig. 2 needs no rotationally fixed connection to the converter housing, since when the clutch 2 is closed the piston 9 has the same rotation direction as

the disk of the clutch 2. Therefore, it is possible for the line 16 to open directly into the pressure space which acts on the first side 8 of the piston 9, so that the pressure sensor 12 can determine the pressure within that space. Apertures 17 such as those on the piston of Fig. 1 are not needed.

Page 5

Reference numerals

- 1 Converter housing
- 2 Clutch
- 3 Pump impeller wheel
- 4 Turbine rotor
- 5 Shaft
- 6 Feed line
- 7 Inside space of the converter
- 8 First side of the piston
- 9 Piston
- 10 Pressure feed line
- 11 Second side of the piston
- 12 Pressure sensor
- 13 Positionally fixed component
- 14 First pressure line
- 15 Rotary connection
- 16 Second pressure line
- 17 Apertures